Assignment 03

Code the following in R

The Google Finance API can be used to get stock price data for a given symbol at higher sampling rate than just daily frequency. In this example, YHOO prices from for 15 days with interval of 300 seconds are requested.

http://www.google.com/finance/getprices?q=YHOO&i=300&p=15d&f=d,o,h,l,c,v

In which the parameters are:

q= stock symbol

x= exchange symbol, may be omitted, for example the above can be

http://www.google.com/finance/getprices?q=YHOO&x=NASDAQ&i=300&p=15d&f=d,o,h,l,c,v

i = interval (here i=300 means intervals of 100 seconds or 5 minutes)

p = number of period (here 15d denotes 15 days of data)

f = parameters (day, close, open, high and low, volume)

The following is an excerpt of the data

```
EXCHANGE%3DNASDAQ
MARKET_OPEN_MINUTE=570
MARKET_CLOSE_MINUTE=960
INTERVAL=300
COLUMNS=DATE,CLOSE,HIGH,LOW,OPEN,VOLUME
DATA=
TIMEZONE_OFFSET=-300
a1452263400,30.49,30.51,30.49,30.51,133480
1,30.67,30.7,30.29,30.5,329140
2,30.75,30.782,30.61,30.67,338581
3,30.76,30.84,30.75,30.755,367287
4,30.86,30.8875,30.75,30.77,330992
5,30.815,30.9,30.81,30.86,404019
```

(3 points) Write a function that takes input parameters q, I, p, f, and sends requests to Google Finance API, retrieves the response, and returns the close price.

(2 point) Write code that reads a list of symbols from an Excel file, calls the function above for each stock symbol, returns data into a variable, and saves the data to an Excel file.

Note: If only close prices are needed, you will just need the parameter f=c, for example

http://www.google.com/finance/getprices?q=YHOO&i=300&p=15d&f=c

Hint: use read.csv as in the example

```
url<-'http://www.google.com/finance/getprices?q=YHOO&i=300&p=15d&f=c'
dat <- read.csv(url)
```

Submission includes code, all the Excel files, and a document explaining your work.